UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,192	08/10/2001	Shell Sterling Simpson	10007680-1	6999

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EXAMINER
NANO, SARGON N

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/928,192	SIMPSON, SHELL STERLING
	Examiner	Art Unit	
	Sargon N. Nano	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on *11/08/05*.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *7 - 37* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1.   This action is responsive to RCE filed on Nov 08, 2005. Claims 7 – 37 are

pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form

the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(e) the invention was described in (1) an **application** for patent, published under
section 122(b), by another filed in the United States before the invention by the
applicant for patent or (2) a patent granted on an application for patent by another
filed in the United States before the invention by the applicant for patent, except
that an international application filed under the treaty defined in section 351(a)
shall have the effects for purposes of this subsection of an **application** filed in the
United States only if *the* international application designated the United States
and was published under Article 21(2) of such treaty in the English language. .

2.   Claims 7, 9 - 20, 22 - 28,29₇.32 - 37 are rejected under 35 U.S.C. 102(e)

as being anticipated by Blumenau et at U.S Patent No. 6,665,714.

As to claim 7, Blumenau teaches one or more computer readable media

having stored thereon a plurality of instructions that, when executed by one or more

processors, causes the one or more processors to perform acts comprising:

identifying one or more devices in a network (see col.6, line 43 — col.7, line12 Blumenau discloses the identification of devices in a network and the ports of particular devices coupled to a. network);

obtaining; for at least one of one or more network switches in the network, an indication of which port of the network switch a computing device is coupled to (see col.7 lines 1 — 12, Blumenau discloses the port of a particular device coupled to a network);

obtaining, for each of the one or more identified devices and for the at least one network switch, an indication of which port of the network switch the identified device is coupled to (see col. 6 lines **4** — 13 and col.6 lines 43 — col7, line 12 Blumenau discloses the identification of the device and what port is used) ; and

determining, for at least one of the one or more identified devices, how physically distant the identified device is to the computing device, wherein the determining is based at least in part on the indication of which port of the network switch the computing device is coupled to and the indication of which ports of the network switch the one or more identified devices are coupled to (see col. 28 lines 35 — 65, and fig.14, Blumenau discloses different ways of storage systems).

As to claim 9, Blumenau teaches one or more computer readable media as recited in claim 7, wherein obtaining an indication of which port of the network switch a computing device is coupled to comprises obtaining the indication from the network switch (see col.7 lines 1 — 5 Blumenau discloses the source identifier identifies the device).

As to claim10, Blumenau teaches one or more computer readable media as recited in claim 7, wherein obtaining an indication of which port of the network switch the identified device is coupled to comprises obtaining the indication from the network switch (see col.7 lines 1 — 12, Blumenau discloses the port of a particular device coupled to a network).

As to claim 11, Blumenau teaches one or more computer readable media as recited in claim 7, wherein the determining comprises generating, for at least one of the one or more identified devices, a ranking indicating a proximity of the identified device to the computing device relative to the other identified devices see col. 29, lines 56 — 67, Blumenau discloses multiple selected system are selected).

As to claim 12, Blumenau teaches one or more computer readable media as recited in claim 11, wherein the plurality of instructions further cause to one or more processors to perform an additional act comprising: presenting, to a user, each of the generated rankings(see figs. 17 — 20)..

As to claim13, Blumenau teaches one or more computer readable media as recited in claim 7, wherein the computing device comprises both the computer readable media and the one or more processors (see col. 7, lines 15 — 35, Blumenau discloses the use of a host processor device to communicate with storage system) .

As to claim 14, Blumenau teaches one or more computer readable media as recited in claim 7, wherein the computing device comprises both the one or more

processors and an I/O device to read the one or more computer readable media (see col. 7, lines 15 — 35, Blumenau discloses the use of a host processor device to communicate with storage system).

As to claim15, Blumenau teaches one or more computer readable media as recited in claim 7, wherein determining how physically distant the identified device is to the computing device comprises:

checking, whether the identified device shares the same port on the switch as the computing device and with a smallest number of other devices also sharing the same port (see col.7 lines 1 — 12, (see col.7 lines 1 — 12, Blumenau discloses the port of a particular device is coupled to a network); and ;

determining, if the identified device shares the same port on the switch as the computing device and with the smallest number of other devices also sharing the same port, that the identified device is one of the physically closest devices to the computing device (see col.28, lines 35 — 65, Blumenau discloses the sharing of a port by devices).

As to claim 16, Blumenau teaches one or more computer readable media as recited in claim 15, wherein determining how physically distant the identified device is to the computing device further comprises:

checking whether the identified device shares the same port on the switch as the computing device and with a smaller number of other devices also sharing the same port (see col.28, lines 35 — 65, Blumenau discloses the sharing of a port by devices); and

determining, if the identified device shares the same port on the switch as the computing device and with the smaller number of other devices also sharing the same port, that the identified device is a second physically closest device to the computing device. (see col.28, lines 35 — 65, Blumenau discloses the sharing of a port by devices and col.28 lines 35 — 65).

As to claim 17, Blumenau teaches one or more computer readable media as recited in claim 16, wherein determining how physically distant the identified device is to the computing device further comprises:

checking whether the identified device shares the same port on the switch as the computing device without regard for a number of other devices also sharing the same port (see col.28, lines **35** — 65, Blumenau discloses the sharing of a port by devices and col.28 lines 35 — 65); and

determining, if the identified device shares the same port on the switch as the computing device without regard for the number of other devices also sharing the same port, that the identified device is a third closest device to the computing device (see col.28, lines 35 — 65, Blumenau discloses the sharing of a port by devices and col.28 lines 35 — 65).

As to claim 18, Blumenau teaches one or more computer readable media as

recited in claim 17, wherein determining how physically distant the identified device is

to the computing device further comprises:

checking whether the identified device shares the switch with any number

of other devices also sharing the switch(see co1.28, lines 35 -- 65, Blumenau

discloses the sharing *of a* port by devices and col.28 lines 35 — 65);

determining, if the identified device shares the switch with any number of

other devices also sharing the switch, that the identified device is a fourth

physically closest device to the computing device(see col. 28 lines 35 — 65); and

determining, if the identified device does not share the switch with any number of

.other devices also sharing the switch, that the identified device is a fifth closest device

to the computing device (see col. 28 lines 35 — 65).

As to claim 19, Blumenau teaches one or more computer readable media

as recited in claim 7, wherein determining how physically distant the identified

device is to the computing device comprises:

if the identified device shares the same port on the switch as the computing device

and with a smallest number of other devices also sharing the same port, then

determining the identified device is one of the physically closest devices to the

computing device(see col.28, lines 35 — 65, Blumenau discloses the sharing of a

port by devices);

otherwise, if the identified device shares the same port on the switch as the

computing device and with a smaller number of other devices also sharing the

same port, then determining the identified device is a second physically closest

device to the computing device(see col.28, lines 35 — 65, Blumenau discloses the

sharing of a port by devices and col. 28 lines 35 and 65);

otherwise, if the identified device shares the same port on the switch as the

computing device and without regard for a number of other devices also sharing the

same port, then determining the identified device is a third physically closest device

to the computing device(see col.28, lines 35 - 65, Blumenau discloses the sharing of

a port by devices and col. 28 lines 35 and 65);

; and

otherwise, if the identified device shares the switch with any number of other

devices also sharing the switch, then determining the identified device is a fourth

physically closest device to the computing device (see col.28, lines 35 — 65, Blumenau

discloses the sharing of a port by devices and col. 28 lines 35 and 65).

As to claim 20, Blumenau teaches a method, implemented in a computing device that

is part of a network, the method comprising:

detecting one or more network switches in the network (see col.6, line 43 — col.7,

line12 Blumenau discloses the identification of devices in a network)

identifying one or more other devices of a particular type in the network (see col.6,

line 43 — col.7, line12 Blumenau discloses the identification of devices in a

network).

obtaining, for each of the identified one or more other devices and for at least one of

the one or more network switches, an indication of which port of the network switch

the device is coupled to, wherein the indication is obtained from at least one of the

one or more network switches(see col.6, line 43 — col.7 line12 Blumenau discloses

the identification of devices in a network and what port is used; and

ranking, based at least in part on the obtained indications as well as which port of the

network switch the computing device is coupled to, the one or more other devices in

terms of their inferred physical proximity to the computing device(see col. 29, lines

56 — 67) Blumenau discloses multiple selected systems are selected) .

As to claim 22, Blumenau teaches a method as recited in claim 20, wherein identifying

one or more other devices of a particular type in the network comprises identifying

the one or more other devices in the network by accessing a list of device

identifiers (see col.6, line **43** — col.7, line12 Blumenau discloses the identification

of devices in a network).

As to claim 23, Blumenau teaches a method as recited in claim 20, wherein

identifying one or more other devices of a particular type in the network comprises

identifying the one or more other devices in the network by querying a plurality of

devices on the network to determine, for each of the plurality of devices, whether the

device is of the particular type (see col.7 lines 1 — 5 Blumenau discloses the source

identifier identifies the device).

As to claim 24, Blumenau teaches a method as recited in claim 20, further

comprising presenting, to a user, the ranking of at least one of the one or more other

devices (see col. 28 lines 35 — 65).

As to claim 25, Blumenau teaches a method as recited in claim 20, wherein

ranking a device of the one or more other devices comprises:

checking whether the device shares the same port on a network switch as the

computing device and with a smallest number of additional devices also sharing the

same port (see col. 28 lines 35 — 65) ; and

determining, if the device shares the same port on the network switch as the

computing device and with the smallest number of additional devices also sharing the

same port, that the device is one of the physically closest devices to the computing

device (see col. 28 lines 35 — 65).

As to claim 26, Blumenau teaches a method as recited in claim 25, wherein

ranking the device of the one or more other devices further comprises:

checking whether the device shares the same port on the network switch as

the computing device and with a smaller number of the additional devices also

sharing the same port (see col. 281 lines 35 — 65) ;

determining, if the device shares the same port on the switch as the computing

device and with the smaller. number of the additional devices also sharing the same

port, that the device is a second physically closest device to the computing device (

see col. 28 lines 35 — 65) .

As to claim 27, Blumenau teaches a method as recited in claim 26, wherein

ranking the device of the one or more other devices further comprises:

checking whether the device shares the same port on the switch as

the computing device without regard for a number of additional devices

also sharing the same port (see col. 28 lines 35 — 65 and fig. 17);

determining, if the device shares· the same port on the switch as the

computing device without regard for the number of additional devices also

sharing the same port, that the device is a third physically closest device to

the computing device. (see col. 28 lines 35 — 65 and fig. 22).

As to claim 28, Blumenau teaches a method as recited in claim 27,

wherein ranking the device of the one or more other devices further

comprises:

checking whether the device shares the switch with any number of

additional devices also sharing the switch(see col. 28 lines **35** — 65 and

fig. 22);

determining, if the device shares the switch with any number of additional

devices also sharing the switch, that the device is a fourth physically closest

device to the computing device (see col. 28 lines 35 – 65 and fig. 1 c); and

determining, if the device does not share the switch with any number of

additional devices also sharing the switch, that the device is a fifth closest device to

the computing device (see col. 28 lines **35** – 65 and fig. 1 c).

As to claim 29, Blumenau teaches a method, comprising:

discovering network switches in a network- (see col. 6 line 43'– col. 7 line 12)

identifying devices connected to the network (see col.7 line 1- 12); determining

each switch and each port to which the devices are coupled

(see col.6 lines 4–13 and col.6 lines 43 – col. 7 line 12);

determining each switch and each port to which a user computer is coupled;

and ranking the devices based upon their inferred physical proximity to the user

computer(see col 28 lines 35 – 65 and fig. 14).

As to claim 32, Blumenau teaches the method of claim 29, wherein

identifying devices comprises consulting a list of network device identifiers (see

col.7 line 1-12).

As to claim 33, Blumenau teaches the method of claim 29, wherein

identifying devices comprises querying multiple addresses on the network(see

col.7 line 1-12).

As to claim 34, Blumenau teaches the method of claim 29, wherein determining

each switch and each port to which the devices and the user computer are coupled

comprises obtaining switch and port information from at least one network

switch(see col. 28 lines 35 – 65, and fig. 14).

As to claim 35, Blumenau teaches the method of claim 341 wherein obtaining

switch and portinformation comprises obtaining the switch and port information from

a connection table of the at least one network switch (see col.7 lines 1 -12).

As to claim 36, Blumenau teaches the method of claim 29, further

comprising automatically selecting the physically closest device (see co1.28, lines

35 – 65).

As to claim 37, Blumenau teaches the method of claim 29, further

comprising presenting the rankings to the user(see col. 28 lines **35 – 65).**

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between
> the subject matter sought to be patented and the prior art are such that the
> subject matter as a whole would have been obvious at the time the invention
> was made to a person having ordinary skill in the art to which said subject
> matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

Claims- 8, 211 30 and 31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Blumenau et al U.S. Patent No.6,665,714 and further in view

of official notice.

As to claims 8, 21 and 31 Blumenau teaches a system, a method, and a

computer readable media comprising: a device proximity detector to determine, for each

of one or more devices in a network, an inferred proximity of the device to the system

based at least in part on which port of a network switch the system is coupled to and

to which port of the network switch the device is coupled to (see col.6, line 43 — col.7,

line12 Blumenau discloses the identification of devices in a network and the ports of

particular devices coupled to a network) ; and

a network interface, coupled to the device proximity detector, to allow the device

proximity detector to communicate with the one or more network switches see col. 7

lines 13 — 34 Blumenau discloses the interface of devices in the network may

require little redesign).

Blumenau does not teach the limitation "wherein at least one of the one or more

devices comprises a printer". Official notice is taken that one of the ordinary skill in

the art at the time of the invention was made would include a printer because by doing

so would allow the user to automatically configure different types of devices on

private network using GUI.

As to claim 30 is rejected over Blumenau et al U.S. Patent No.6,665,714 and

further in view of official notice.

Blumenau teaches a SCSI protocol. Blumenau does not explicitly teach SNMP

as recited in claim 30, however Blumenau suggests using a number *of* other

protocols. It would have been obvious that one of the ordinary skill in the art at the

time of the was made invention would use SNMP protocol in Blumenau's invention

because doing so would enable devices in a network to acquire knowledge *of* the

type of protocol that is being used on the particular Fibre Channel interconnect.

Response to Arguments

4.   Applicant arguments have been fully considered but they are not

persuasive. Applicant argues in substance that A) Blumenau does not disclose

how close the identified devices to the computing device".

In response to A) Blumenau teaches identifying devices connected to a host processor

using graphical user interface(GUI) to identify port connection to various devices and

host processors (see col. 2 line 4- 64). The claim states determining how close the

device is based on the port connection to the identified device and the computing

device. The claim language does not specifically define whether "how close" refers to

distance between the 2 computers, number of hops, communication time and so on.

Examiner broadly interprets "how close" to be whether a port connection exists

between the 2 devices therefore Blumenau meets the language of the claimed

limitation.

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

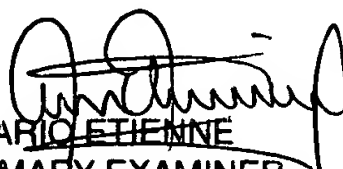mailed until after the end of the THREEWONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and

any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing

date of the advisory action. In no event, however, will the statutory period for reply

expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sargon N Nano whose telephone number is (571)

272-4007. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax

phone number for the organization where this application or proceeding is--assigned is

703-872-9306. Information regarding the status of an application may be obtained

from the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano
Jan. 9, 2005

ARIO ETIENNE
PRIMARY EXAMINER